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09/945,239	08/31/2001	Peiguang Zhou	KCC-16,163	1306

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Senniger, Powers, Leavitt & Roedel
One Metropolitan Square, 16th Floor
St. Louis, MO 63102

EXAMINER

BOYD, JENNIFER A

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/945,239
Filing Date: August 31, 2001
Appellant(s): ZHOU ET AL.

MAILED

MAR 23 2006

GROUP 1700

Christopher Goff
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 6, 2006 appealing from the Office action mailed November 10, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

US Application No. 10/260,951 (filed September 30, 2002)

US Application No. 10/266,440 (filed October 8, 2002)

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

WO 01/15646	TANZER	3-2001
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3,370,106	HALL et al.	2-1968
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

Claims 24 - 33 and 70 – 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanzer (WO 01/15646) in view of Hall (US 3,370,106).

Tanzer is directed to an absorbent article having superabsorbent in discrete pockets on a stretchable substrate (Title).

As to claims 24 and 70, Tanzer teaches an *absorbent composite 44* comprising a selectively stretchable liquid permeable *first substrate layer 46* and a selectively stretchable *second substrate layer 48* (page 6, lines 1 – 5 and Figure 2). Tanzer teaches that a *neckable web 112* may be used for either the *first substrate layer 46* or the *second substrate layer 48* or both (page 9, lines 6 – 10). The *layers 46* and *48* can be secured by a water insensitive attachment means (page 6, lines 25 – 28).

As to claims 32 – 33, Tanzer teaches that the *neckable web 112* may be a porous nonwoven material, such as a spunbonded web, meltblown web or bonded carded web (page 9, lines 23 – 25). The *neckable material 112* may be made of fiber forming polymers, such as polyolefins (page 9, lines 24 – 26), which are known in the art to be thermoplastic materials.

As to claim 71, Tanzer teaches that the *neckable web 112* can comprise a first layer of spunbonded polypropylene, a middle layer of meltblown polypropylene and a second layer of spunbonded polypropylene (page 10, lines 1 – 10).

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As to claim 72, Tanzer teaches that either or both *layers* 46 and 48 can comprise a *neckable web* 112, which may be a porous nonwoven material such as a spunbonded web.

As to claims 24 and 70, Tanzer fails to teach that the water insensitive attachment means is an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000. As to claims 73 – 74, Tanzer fails to teach that the adhesive composition is hot-melt processable at a temperature of about 450 °F and is in liquefied form. As to claim 75, Tanzer fails to teach that the adhesive composition has an atactic polymer with a degree of crystallinity less than about 15%. As to claim 76, Tanzer fails to teach that the adhesive composition has an isotactic polymer with a degree of crystallinity of at least 60%. As to claim 77, Tanzer fails to teach that the adhesive composition comprises between about 50 and about 90 weight percent of atactic polymer and between about 5 and 50 weight percent of the isotactic polymer. As to claim 78, Tanzer fails to teach that the atactic polymer is selected from the group consisting of a low density polyethylene, atactic polystyrene, atactic polybutene, amorphous polyolefin copolymer and combinations thereof. As to claim 79, Tanzer fails to teach that the atactic polymer comprises atactic polypropylene. As to claim 81, Tanzer fails to teach that the isotactic polymer is polypropylene.

Hall is directed to a hot-melt adhesive composition (Title) useful for bonding wood,

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paper, plastics, textiles and other materials. Hall teaches a hot-melt adhesive blend comprising atactic polypropylene and a small portion of a different polymer selected from the group consisting of isotactic polypropylene and polyethylene (column 1, lines 46 - 50). The hot-melt adhesive composition preferably comprises a solid atactic polypropylene (essentially non-crystalline) having a molecular weight in the range of 15,000-60,000 (column 1, lines 57 - 69). It should be noted that essentially non-crystalline means having a degree of crystallinity around 0%. The isotactic (essentially crystalline) component has a molecular weight ranging from 85,000 to 95,000 (column 2, lines 19 - 25 and lines 39 - 45). It should be noted that essentially crystalline means having a degree of crystallinity around 100%.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hot-melt adhesive composition of Hall in the absorbent composite of Tanzer motivated by the desire to produce a composite containing an low-cost adhesive with high performance properties (Hall, column 1, lines 20 - 30).

As to claim 31, Tanzer in view of Hall fails to teach that the first and second layers comprise a single material, said material being folded over and adhesively bonded to itself. However, it would have been obvious to fold over the material of the first layer to create the second layer in order to save manufacturing costs while increasing strength. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fold the first layer, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice.

As to claim 80, it should be noted that Tanzer in view of Hall teaches the use of atactic polypropylene and isotactic polypropylene in the adhesive composition, but does not specifically teach the use of polyethylene. However, polypropylene and polyethylene are both polyolefins and it would be obvious to interchange the two polyolefins because they are similar in properties and commonly used for the same products. It would have been obvious to one having ordinary skill in the art at the time the invention was made to interchange polyethylene for polypropylene as the atactic and isotactic components, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice.

As to claims 25 – 30, although Tanzer in view of Hall does not explicitly teach the claimed static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30, it is reasonable to presume that static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30 is inherent to Tanzer in view of Hall. Support for said presumption is found in the use of like materials (i.e. a first layer

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attached to a second layer using an adhesive composition comprising a blend of about 10 – 90 weight percent of an amorphous polypropylene having a molecular weight of at least 150,000 and about 10 – 90 weight percent of a crystalline polypropylene having a molecular weight of less than about 300,000) which would result in the claimed property. The burden is upon the Appellant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30 would obviously have been present once the Tanzer in view of Hall product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claim 82, the details of the patent are discussed above.

(10) Response to Argument

Appellant argues that in establishing obviousness the Office must show reference that teach all of the claimed limitations along with some motivation or suggestion, either in the references themselves or in knowledge generally available to one skilled in the art, to combine the references and arrive at the claimed subject matter. Appellant argues that references must suggest the desirability of the combination to create a case for obviousness. The Examiner submits that Hall does provide sufficient motivation to produce the composite of Tanzer with adhesive of Hall in order to create a composite with low-cost and high performance properties.

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This motivation is found specifically in the Hall reference in column 1, lines 20 – 25. The Examiner agrees that Hall discusses using the hot melt adhesive for bonding two materials such as corrugated paper and kraft paper facer in the Abstract. However, Hall also teaches that it is known to use hot melt adhesives for bonding wood, paper, plastics, *textiles* and other materials in column 1, lines 35 – 45. It should be noted that “disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments” *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Appellant argues that it would not be clear for one skilled in the art to necessarily choose the low-cost adhesive of Hall rather than the myriad of other low-cost, high performance adhesives available in the art. As discussed in the previous rejection, Tanzer teaches that the *layers 46 and 48* can be secured by a water insensitive attachment means (Tanzer, page 6, lines 25 – 28). Tanzer further notes that the layers can be secured by a wide variety of conventional techniques such as adhesive bonding (Tanzer, page 12, lines 5 – 15). Thus, Tanzer provides an express suggestion to look to the prior art to determine what adhesives are conventionally used in the art and find a suitable adhesive for the particular application. Hall teaches a hot-melt adhesive having Appellant’s claimed characteristics wherein the adhesive has high performance properties and is low-cost (Hall, column 1, lines 20 – 25). Hall additionally notes that the adhesive can be used for bonding a wide variety of substrates including textiles (Hall, column 1, lines 35 – 45). Hall provides sufficient motivation to incorporate the disclosed hot-melt adhesive in the composition of Tanzer in order to have a composite having a low-cost and high performance adhesive. The Examiner submits that proper motivation has been provided. If the Appellant provides a showing of unexpected results from using the adhesive composition in the

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laminate structure as claimed, the combination of Tanzer in view of Hall would no longer be considered proper.

Appellant argues Wang (US 6,329,468) indicates that one skilled in the art would be guided away from combining Tanzer and Hall references to arrive at Appellant's invention. Appellant indicates that Wang discusses in numerous paragraphs the shortcomings and limitations of hot-melt adhesives comprising atactic and isotactic polymers in the place of the flexible polyolefins. It should be noted that Wang only discusses the shortcomings and limitations of *atactic* polymers and not the *blend* of atactic and isotactic polymers as claimed by Appellant. Wang is considered to be irrelevant because it is not commensurate in scope with the claimed invention.

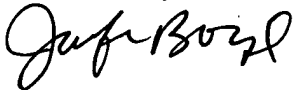
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jennifer Boyd



Conferees:

Terrel Morris



Carol Chaney




ULA RUDDOCK
PRIMARY EXAMINER